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FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			KADING, JOSHUA A	
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DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/745,873	Applicant(s) LEE, SEOUNG-YOUNG	
	Examiner Joshua Kading	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5

Claims 17, 18, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by applicant's admitted prior art (AAPA).

Regarding claim 17, AAPA discloses "a method for informing a plurality of
10 terminals of the occupied or unoccupied state of channels of a CDMA system, comprising:

providing a unique PN code for each one of a plurality of channels used in the CDMA system from a base station to each one of a plurality of terminals in communication with the base station (figure 1 shows the terminals and base station in
15 contact with each other; figure 3 shows that each channel has a unique PN code);

transmitting a power control signal over an occupied channel using the PN code of the occupied channel (figure 3 shows the power control signal transmitted over an occupied channel using the PN code); and

transmitting an idle signal over an idle channel using the same PN code as the
20 idle channel (figure 3 shows that the idle channel is transmitted on the same PN code channel as the power control signal)."

Regarding claim 18, AAPA discloses "the method of claim 17, wherein the power control signal is transmitted on a channel when the base station acquires synchronization and phase of a data packet transmitted by one of the plurality of terminals (figure 3 shows the transmission of the power control signal; page 3, lines 13-16 of the specification point to the preamble aiding in synchronization before transmission of the power control signal), and wherein the idle signal is then transmitted on the channel when the base station has received the entire packet of data (figure 3 where it shows the idle signal is transmitted when the channel is not be used by a terminal or when a packet has finished transmitting)."

Regarding claim 25, AAPA discloses "a method for allocating channels comprising:

receiving channel information by a mobile terminal regarding at least one channel allocated to at least one other mobile terminal (figure 1 shows the terminals and base station; figure 2 as described in the specification, page 3, lines 4-7 where the terminal by detecting whether or not the channel is idle is receiving channel information from the base station);

detecting by the mobile terminal whether the at least one channel of the at least one other mobile terminal is being used for data transmission (specification, page 3, lines 4-7); and

transmitting by the mobile terminal data over the at least one channel of the at least one other mobile terminal when the at least one channel of the at least one other mobile terminal is not being used for data transmission is detected (figure 2, ST2)."

- 5 Regarding claim 26, AAPA discloses "the method of claim 25, further comprising: transmitting from the base station to the mobile terminal a state signal indicating whether the at least one channel of the at least one other mobile terminal is available or unavailable for transmission (figure 3, where the power control signal indicates the unavailable state of a channel as can be read on page 4, line 3 of the specification)."

10

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- 15 Claims 1-6, 8-14, 16, 19-24, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (AAPA) in view of Benveniste (U.S. Patent 5,809,423).

- 20 Regarding claim 1, AAPA discloses "a method for allocating channels in a CDMA packet data system, comprising:

providing channel availability information for each of a plurality of channels from a base station to each of a plurality of terminals (figure 1 shows the terminals and base station; figure 2 shows the channel availability information);

transmitting a state signal from the base station over each of the allocated
5 channels indicating the unavailable state of the allocated channels (figure 3, where the power control signal indicates the unavailable state of a channel as can be read on page 4, line 3 of the specification)."

AAPA lacks what Benveniste discloses, "dynamically allocating available channels to corresponding ones of the plurality of terminals to allow transmission of
10 packet data according to an available or unavailable state of each channel (col. 9, lines 47-54; it should also be noted that Benveniste allows for application to a CDMA system as can be read in col. 19, lines 36-40)".

It would have been obvious to one with ordinary skill in the art at the time of invention to include the dynamic allocation of channels with the rest of the method for
15 the purpose of allowing a cell (or group of terminals) where all channels are busy to borrow an idle channel of a different cell. The motivation being that by borrowing channels the system allows for more users to access the network (Benveniste, col. 7, lines 9-10).

20 Regarding claim 2, AAPA and Benveniste disclose the method of claim 1. However, Benveniste lacks what AAPA further discloses "the base station transmits information containing all PN codes used by the base station to each one of the plurality

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of terminals (page 1, lines 15-19; it should be noted that although AAPA does not explicitly disclose the sending of all PN codes to the terminals, it does suggest that the terminals in a group are given their PN codes to access their assigned channel; it also noted, that when Benveniste is applied to AAPA as in claim 1 the PN codes of AAPA must be transmitted to all the terminals, that is to say if the terminals didn't have all the PN codes, they wouldn't be able to access the different channels of the system and there would be no borrowing of the channels, thus the PN codes must be transmitted to all the terminals)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the sending all the PN codes to all the terminals with the method of claim 1 for the same reasons and motivation as in claim 1.

Regarding claim 3, AAPA and Benveniste disclose the method of claim 1. However, Benveniste lacks what AAPA further discloses "simultaneously monitoring each of the plurality of channels in parallel to detect whether the state signal indicating channel availability is transmitted by the base station over any of the plurality of channels (page 3, lines 1-12 of the specification; figure 3 suggests that the monitoring of the channels is done simultaneously because the power control (or state signal) is transmitted whenever a terminal is communicating on that channel and as can be seen a terminal on one channel can communicate at the same time as a terminal on another channel, since the other terminals in a group must be aware of the availability of their channel, each channel must be monitored continuously so that terminals don't communicate at the same time, i.e. simultaneously); sending the packet of data through

an idle channel, if an idle channel signal is detected (page 3, lines 2-3 of the specification); waiting until an idle channel is available, if an occupied channel signal is detected (figure 2, shows that a terminal waits to transmit until the channel is not idle)."

It would have been obvious to one with ordinary skill in the art at the time of invention to

5 include the simultaneous monitoring and the transmitting during an idle state with the method of claim 1 for the same reasons and motivation as in claim 1.

Regarding claim 4, AAPA and Benveniste disclose the method of claim 3.

However, Benveniste lacks what AAPA further discloses "the step of simultaneously

10 monitoring each of the plurality of channels comprises detecting on each channel one of a power control signal and an idle signal, wherein the power control signal is an occupied channel signal indicating unavailability of the channel, and the idle channel signal indicates channel availability (figure 3 where there is an idle signal and a power control signal transmitted)." It would have been obvious to one with ordinary skill in the
15 art at the time of invention to include the idle signal and the control power signal with the method of claim 3 for the same reasons and motivation as in claim 3.

Regarding claim 5, AAPA and Benveniste disclose the method of claim 1.

However, Benveniste lacks what AAPA further discloses "transmitting a power control

20 signal through a downward link channel corresponding to the allocated channel through which a packet of data is transmitted when synchronization is acquired using a preamble of the data packet (figure 3, where there is a power control signal transmitted

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on channel A with terminal 2; page 3, lines 13-16 of the specification point to the preamble aiding in synchronization); and transmitting a channel occupancy release signal through the downward link channel corresponding to the allocated channel through which the data packet was transmitted when the data packet has been fully
5 received (page 4, lines 4-8 where the transmitting of an idle signal after the packet has been transmitted is the functional equivalent to transmitting a channel occupancy release signal in that it signifies the release of the channel from the terminal, it allows other terminals to access the channel)."

It would have been obvious to one with ordinary skill in the art at the time of
10 invention to include the power control signal and the channel occupancy release signal with the method of claim 1 for the same reasons and motivation as in claim 1.

Regarding claim 6, AAPA and Benveniste disclose the method of claim 1.
However, AAPA lacks what Benveniste discloses "each of the available channels are
15 dynamically allocated to different ones of the plurality of terminals (col. 9, lines 47-54 where "the call" represents a terminal"; it should also be noted that Benveniste allows for application to a CDMA system as can be read in col. 19, lines 36-40)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the dynamically allocating channels to different terminals for the same reasons and
20 motivation as in claim 1.

Regarding claim 8, AAPA discloses "a method for transmitting packet data by dynamically allocating channels in a communication system, comprising:

providing channel availability information for each of a plurality of channels from a base station to each of a plurality of terminals (figure 1 shows the terminals and base station; figure 2 shows the channel availability information);

determining which, if any, of the plurality of channels is in an occupied state using a corresponding plurality of PN codes (page 1, lines 15-19 discloses the PN codes and figure 3 shows the power control signal with a PN code being used to identify an occupied state)..."

However, AAPA lacks what Benveniste discloses "...transmitting a data packet through a dynamically allocated unoccupied one of the plurality of channels for transmission and monitoring each one of the plurality of channels to determine when the occupied state of one of the plurality of channels is released, if there is no channel in the unoccupied state (col. 9, lines 47-54; it should also be noted that Benveniste allows for application to a CDMA system (a PN code system) as can be read in col. 19, lines 36-40)".

It would have been obvious to one with ordinary skill in the art at the time of invention to include the dynamic allocation of channels with the rest of the method for the purpose of allowing a cell (or group of terminals) where all channels are busy to borrow an idle channel of a different cell. The motivation being that by borrowing channels the system allows for more users to access the network (Benveniste, col. 7, lines 9-10).

Regarding claim 9, AAPA and Benveniste disclose the method of claim 8.

However, AAPA and Benveniste both lack "the step of determining the occupied state comprises simultaneously multiplying the PN code for each channel by a signal

5 received from a base station." Although both AAPA and Benveniste lack "multiplying the PN code for each channel by a signal received from a base station" it is known in the art that this is how a communication system using PN codes works. The signal is modulated with a PN code so that it is "spread" across a plurality of frequencies. Then it is transmitted and demodulated so that the original message may be constructed. It
10 would have been obvious to one with ordinary skill in the art at the time of invention to include the PN multiplying with the method of claim 8 for the same reasons and motivation as in claim 8.

Regarding claim 10, AAPA and Benveniste disclose the method of claim 9.

15 However, Benveniste lacks what AAPA discloses "the multiplication is performed at a rate equal to a power control signal transmission rate of the base station (figure 3 shows the PN code (not including the synchronization) is the same length as the power control signal thus suggesting that the multiplication of the PN code is performed at a same rate as the power control signal)." It would have been obvious to one with ordinary skill in the
20 art at the time of invention to have the multiplication rate the same as the power control signal with the method of claim 9 for the same reasons and motivation as in claim 9.

Regarding claim 11, AAPA and Benveniste disclose the method of claim 8.

However, Benveniste lacks what AAPA further discloses "determining that a channel using a prescribed one of the plurality of PN codes is in an idle state and transmitting the data packet on the idle channel, if a base station transmits an idle signal on the
5 channel (page 3, lines 2-3 of the specification); and determining that each one of the plurality of channels is in an occupied state and waiting until one of the plurality of channels becomes idle if the base station transmits a power control signal on each channel (figure 2, shows that a terminal waits to transmit until the channel is not idle)." It would have been obvious to one with ordinary skill in the art at the time of invention to
10 include the transmitting during an idle state with the method of claim 8 for the same reasons and motivation as in claim 8.

Regarding claim 12, AAPA and Benveniste disclose the method of claim 11.

However, Benveniste lacks what AAPA discloses "a signal transmitted from the base
15 station is multiplied by each one of the plurality of PN codes to determine if the channel associated with a prescribed one of the PN codes is occupied or idle (figure 3 suggests that a PN code (specifically PN A in figure 3) is multiplied or modulated with a power control signal from the base station which identifies the availability status of the channel)." It would have been obvious to one with ordinary skill in the art at the time of
20 invention to include the multiplied PN codes and the signal from the base station with the method of claim 11 for the same reasons and motivation as in claim 11.

Regarding claim 13, AAPA and Benveniste disclose the method of claim 12.

However, Benveniste lacks what AAPA further discloses "a power control signal transmitted on a channel indicates that the channel is occupied (figure 3 shows the power control signal is transmitted only when a terminal is using or occupying the

5 channel)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the power control signal with the method of claim 12 for the same reasons and motivation as in claim 12.

Regarding claim 14, AAPA and Benveniste disclose the method of claim 12.

10 However, Benveniste lacks what AAPA further discloses "each channel has a unique PN code (page 1, lines 16-17 of the specification)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the unique PN code for each channel with the method of claim 12 for the same reasons and motivation as in claim 12.

15

Regarding claim 16, AAPA and Benveniste disclose the method of claim 11.

However, Benveniste lacks what AAPA further discloses "a terminal transmitting the data packet has stored in the terminal the PN code for each one of the plurality of channels (page 1, lines 15-19; it should be noted that although AAPA does not explicitly

20 disclose storing all PN codes in the terminals, it does suggest that the terminals in a group are given their PN codes to access their assigned channel; it also noted, that when Benveniste is applied to AAPA as in claim 1 the PN codes of AAPA must be

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stored in all the terminals, that is to say if the terminals didn't have all the PN codes, they wouldn't be able to access the different channels of the system and there would be no borrowing of the channels, thus the PN codes must be stored in all the terminals)." It would have been obvious to one with ordinary skill in the art at the time of invention to

5 include the storing all the PN codes in all the terminals with the method of claim 11 for the same reasons and motivation as in claim 11.

Regarding claim 24, AAPA and Benveniste disclose the method claim 8.

However, Benveniste lacks what AAPA further discloses "establishing in a base station

10 the plurality of channels for data communication, each channel having a unique PN code (figure 1 shows each terminal in communication with a base station; figure 3 shows the terminals using PN codes that are unique to each channel); receiving from the base station the unique PN codes of each of the plurality of channels (page 1, lines 15-19; it should be noted that although AAPA does not explicitly disclose the receiving

15 of all PN codes at the terminals, it does suggest that the terminals in a group are given their PN codes to access their assigned channel; it also noted, that when Benveniste is applied to AAPA as in claim 1 the PN codes of AAPA must be received at all the terminals, that is to say if the terminals didn't have all the PN codes, they wouldn't be able to access the different channels of the system and there would be no borrowing of

20 the channels, thus the PN codes must be received at all the terminals); and monitoring each of the plurality of channels to determine and occupy the state of each channel

(page 3, lines 1-12 of the specification; figure 3 shows the power control signal is used to identify an occupied channel)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the unique PN codes and monitoring of channels with the method of claim 8 for the same reasons and motivation as in claim 8.

Regarding claim 19, AAPA discloses "the method of claim 18, wherein...the plurality of terminal have stored therein the unique PN code of each one of the plurality of channels (figure 3 shows the communication between base station and terminals, thus the PN codes must be stored within the terminals so that they may communicate with the base station)." However, AAPA lacks what Benveniste discloses "...each one of the plurality of terminals stores therein the unique PN code of each...channel (col. 9, lines 47-54 where having a terminal borrow a channel from a different cell means that the terminal must have the borrowed channel's PN code stored within it so that it may communicate using the borrowed channel; it should also be noted that Benveniste allows for application to a CDMA system as can be read in col. 19, lines 36-40)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the storing all PN codes in each terminal with the rest of the method for the purpose of allowing a cell (or group of terminals) where all channels are busy to borrow an idle channel of a different cell. The motivation being that by borrowing channels the system allows fore more users to access the network (Benveniste, col. 7, lines 9-10).

Regarding claim 20, AAPA discloses "a method allocating channels in a CDMA packet data system, comprising: receiving channel availability information for each of a plurality of channels from a base station (figure 1 shows the terminals and base station; figure 2 shows the channel availability information)...receiving from the base station a
5 power control signal on the allocated channel (figure 3 shows the power control signal on the allocated channel)."

However, AAPA lacks what Benveniste discloses "...dynamically allocating an available channel and transmitting a data packet to the base station using the allocated channel (col. 9, lines 47-54; it should also be noted that Benveniste allows for
10 application to a CDMA system as can be read in col. 19, lines 36-40)..."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the dynamic allocation of channels with the rest of the method for the purpose of allowing a cell (or group of terminals) where all channels are busy to borrow an idle channel of a different cell. The motivation being that by borrowing
15 channels the system allows for more users to access the network (Benveniste, col. 7, lines 9-10).

Regarding claim 21, AAPA and Benveniste disclose the method of claim 20. However, Benveniste lacks what AAPA further discloses "the power control signal is
20 released when the data packet has been transmitted (figure 3 shows that when the terminal has transmitted the packet, the power control signal is released and replaced by an idle signal)." It would have been obvious to one with ordinary skill in the art at the

time of invention to include the releasing of the power control signal with the method of claim 20 for the same reasons and motivation as in claim 20.

Regarding claim 22, AAPA and Benveniste disclose the method of claim 20.

5 However, Benveniste lacks what AAPA further discloses "the power control signal indicates unavailability of the channel (figure 3 shows that the power control signal is transmitted when a terminal is using the channel, i.e. when the channel is unavailable)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the indicating of unavailability using the power control signal with the method of
10 claim 20 for the same reasons and motivation as in claim 20.

Regarding claim 23, AAPA and Benveniste disclose the method of claim 22.

However, Benveniste lacks what AAPA further discloses "a plurality of terminals are configured to simultaneously monitor channel availability information for all channels of
15 the base station and transmit data on the first available channel detected (page 3, lines 1-12 of the specification; figure 3 suggests that the monitoring of the channels is done simultaneously because the power control is transmitted whenever a terminal is communicating on that channel and as can be seen a terminal on one channel can communicate at the same time as a terminal on another channel, since the other
20 terminals in a group must be aware of the availability of their channel, each channel must be monitored continuously so that terminals don't communicate at the same time, i.e. simultaneously)." It would have been obvious to one with ordinary skill in the art at

the time of invention to include the simultaneous monitoring of availability with the method of claim 22 for the same reasons and motivation as in claim 22.

Regarding claim 27, AAPA discloses "the method of claim 25, further comprising:

5 transmitting from the base station to the mobile of terminal all of the PN codes used by the base station (col. 9, lines 47-54; it should also be noted that Benveniste allows for application to a CDMA system as can be read in col. 19, lines 36-40; it also noted, that when Benveniste is applied with AAPA as in claim 25 the PN codes of AAPA must be transmitted to all the terminals, that is to say if the terminals didn't have all the PN
10 codes, they wouldn't be able to access the different channels of the system as in Benveniste and there would be no borrowing of the channels, thus the PN codes must be transmitted to all the terminals)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the dynamic allocation of channels with the rest of the method for
15 the purpose of allowing a cell (or group of terminals) where all channels are busy to borrow an idle channel of a different cell. The motivation being that by borrowing channels the system allows for more users to access the network (Benveniste, col. 7, lines 9-10).

20 Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Benveniste as applied to claims 1 and 8 respectively above, and further in view of Tiedemann, Jr. (U.S. Patent 5,604,730).

Regarding claim 7, AAPA and Benveniste disclose the method of claim 1.

However, AAPA and Benveniste lack what Tiedemann discloses "each one of the plurality of channels comprises a traffic channel and a signaling channel, and wherein
5 the packet data is transmitted over the data channel and the state signal is transmitted over the signaling channel (figure 7, element 705 shows that each larger traffic channel contains a power control channel (signaling channel) and traffic channel)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the signaling and traffic channels with the method of claim 1 for the purpose of allowing the
10 identification of an available channel using the power control. The motivation being that a power control signal allows a terminal to control a channel without other terminal interference (AAPA, page 4, lines 1-3 of specification).

Regarding claim 15, AAPA and Benveniste disclose the method of claim 12.

15 However, AAPA and Benveniste lack what Tiedemann discloses "each channel comprises a signaling channel and a traffic channel (figure 7, element 705 shows that each larger traffic channel contains a power control channel (signaling channel) and traffic channel)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the signaling and traffic channels with the method of claim
20 12 for the purpose of allowing the identification of an available channel using the power control. The motivation being that a power control signal allows a terminal to control a channel without other terminal interference (AAPA, page 4, lines 1-3 of specification).

Response to Arguments

The objections to claims 1-8 have been withdrawn in light of applicant's amendment filed 10 June 2004.

5

The 35 U.S.C. 112 second paragraph rejection of claim 24 has been withdrawn in light of applicant's amendment filed 10 June 2004.

Applicant's arguments filed 10 June 2004 have been fully considered but they are
10 not persuasive.

Regarding the 35 U.S.C. 102(b) rejection of claims 17 and 18, applicant argues that applicant's admitted prior art (AAPA) does not disclose "providing a unique PN code for each one of a plurality of channels used in the CDMA system from a base
15 station to each one of a plurality of terminals in communication with the base station."
The examiner respectfully disagrees.

As stated in the rejection, figure 1 shows that there are a plurality of terminals in communication with a base station and as seen in figure 3 each channel is assigned its own unique PN code. This is further disclosed by the specification on page 1, lines 15-
20 17. Further as seen by figures 1 and 3, the terminals are in direct communication with the base station and this communication takes place over the unique channels for each group of terminals.

It should be noted that the examiner is allowed to give the claim language the broadest interpretation allowed (see MPEP 2106.II.C). It is because of this that AAPA fully reads on the language as presented in claims 17 and 18. If applicant intended for the claim language to describe a different type of invention than the one interpreted by
5 the examiner, then this must be made clear in the claim language.

Regarding the 35 U.S.C. 103 rejection of claims 1-6, 8-14, 16, and 19-24, applicant argues that AAPA and Benveniste do not disclose the "providing channel availability information for each of a plurality of channels from a base station to each of
10 a plurality of terminals". The examiner respectfully disagrees.

As stated in the above rejections, figure 2 of AAPA is the process by which a terminal is provided with channel availability information of other channels from the base station, and although AAPA describes the channel availability information only being transmitted between terminals in a group, the combination of AAPA in view of
15 Benveniste provides for the providing for all other channel information. The reason being that in Benveniste a terminal can use channels from other groups. Since the terminal can use these other channels, it would have been obvious to one with ordinary skill in the art to use the method of providing channel availability of AAPA in Benveniste. If a terminal could not detect the channel availability of all channels, including those
20 from other groups as in Benveniste, then there would be possible collisions. This fact is noted by applicant on page 3, lines 8-10 of the specification. Therefore, the combination of AAPA in view of Benveniste fully reads on applicant's claimed invention.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

- 5 § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not
10 mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
20 supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

- 5 For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joshua Kading
Examiner
Art Unit 2661

10 October 12, 2004



KENNETH VANDERPUYE
PRIMARY EXAMINER